

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 87-1

SITE CLEANUP REQUIREMENTS FOR:

HEWLETT PACKARD COMPANY
333 LOGUE AVENUE SITE
MOUNTAIN VIEW
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

1. Hewlett Packard Company (hereinafter called the discharger) owns the property located at 333 Logue Avenue, Mountain View, Santa Clara County.
2. The discharger has occupied the site since 1965. Manufacturing activities, consisting of a machine shop, paint booth, and degreasers, were conducted at the site from 1965 until 1981. The hazardous materials used in this operation included: trichloroethene (TCE), tetrachloroethene (PCE), acetone, and freons.
3. A 500 gallon underground waste solvent storage tank was installed in 1972. The tank was taken out of service in 1978 and filled with water. In 1982 the tank was cleaned and filled with concrete.
4. Subsurface investigations were initiated by Hewlett Packard in June 1983. The investigations revealed volatile organic compound (VOC) pollution, principally PCE and TCE, in both soil and groundwater in the vicinity of the underground waste solvent storage tank.
5. Subsequent to the initial investigation, the discharger has undertaken follow-up investigations to further define the extent of pollution, as well as to identify other potential pollution source areas. These investigations indicate that two loading docks located onsite are also pollution source areas possibly due to spillage during unloading. These investigations have also identified potential upgradient and downgradient sources of pollution.
6. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for South San Francisco Bay and contiguous surface and groundwaters.

7. The existing and potential beneficial uses of the groundwater underlying and adjacent to the site include:
 - a. Municipal and domestic supply
 - b. Industrial process supply
 - c. Industrial service supply
 - d. Agricultural supply
8. The discharger has caused or permitted, and threatens to cause or permit waste to be discharged or deposited where it is or probably will be discharged to waters of the state and creates or threatens to create a condition of pollution or nuisance.
9. This action is an order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321 of the Resources Agency Guidelines.
10. The Board has notified the discharger and interested agencies and persons of its intent to prescribe Site Cleanup Requirements for the discharge and has provided them with an opportunity for a public hearing and opportunity to submit their written views and recommendations.
11. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the discharger shall cleanup and abate the effects described in the above finding as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect the beneficial uses of waters of the State is prohibited.
2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.
3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of pollutants are prohibited.

B. SPECIFICATIONS

1. The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. The discharger shall conduct monitoring activities as needed to define the local hydrogeological conditions, and the lateral and vertical extent of the soil and groundwater pollution in and contiguous to the zone of known pollution. Should monitoring results show evidence of plume migration, additional plume characterization may be required.

C. PROVISIONS

1. The discharger shall submit to the Board technical reports on self-monitoring work performed according to a program approved by the Board's Executive Officer.
2. The discharger shall comply with Prohibitions A.1., A.2., and A.3, and Specifications B.1. and B.2. above, in accordance with the following time schedule and tasks:

- a. COMPLETION DATE: May 1, 1987

TASK: Submit a technical report satisfactory to the Executive Officer which summarizes the results of an investigation to identify, locate, and evaluate private and public wells which may act as vertical conduits for the migration of pollutants from shallow to deep aquifers as related to the discharger's site. The technical report shall also describe well sealing or other effective measures which will be taken to prevent migration of pollutants to lower aquifers via any identified unsealed well(s) that may be impacted by pollutants that originated from the discharger's site, including a time schedule for completion.

- b. COMPLETION DATE: May 1, 1987

TASK: Submit a technical report satisfactory to the Executive Officer defining the horizontal and vertical extent of shallow soil and groundwater pollution onsite.

- c. COMPLETION DATE: July 20, 1987

TASK: Submit a technical report satisfactory to the Executive Officer which contains a recommended interim remedial action plan with a discussion of alternative plans considered in the development of the recommended plan. This report shall include consideration of the removal and/or cleanup of polluted soils, and an implementation time schedule, if the plan includes such removal or cleanup. This report shall also consider any necessary hydraulic control systems to contain and cleanup polluted groundwater onsite and should include a completed NPDES application to discharge to surface waters, if such discharge is an element of the plan.

d. COMPLETION DATE: December 30, 1987

TASK: Submit a technical report satisfactory to the Executive Officer documenting completion of the installation and commencement of operations of necessary hydraulic control and/or treatment facilities of adequate design to contain and cleanup the onsite pollutant plume.

e. COMPLETION DATE: January 15, 1988

TASK: Submit a technical report satisfactory to the Executive Officer defining the horizontal and vertical extent of the offsite groundwater pollution.

f. COMPLETION DATE: May 1, 1988

TASK: Submit a technical report satisfactory to the Executive Officer which evaluates the effectiveness of the hydraulic containment system. Such an evaluation shall include, but need not be limited to, an estimation of the flow capture zones of the extraction wells, establishment of the cones of depression by field measurements, and presentation of chemical monitoring data, if extraction wells are proposed. This report shall also evaluate and document the removal and/or cleanup of polluted soils, if such removal and/or cleanup is an element of the remedial action plan. Specific modifications to the system and an implementation time schedule shall be proposed in the event that the hydraulic control system is demonstrated not to be effective in containing and cleaning up the onsite pollutant plume.

g. COMPLETION DATE: November 1, 1988

TASK: Submit a technical report satisfactory to the Executive Officer containing the remedial investigation, an evaluation of alternative final remedial measures and a recommendation on which additional measures, if any, should be implemented.

3. The submittal of technical reports evaluating initial, interim and final remedial measures will include a projection of the cost, effectiveness, benefits, and impact on public health, welfare, and environment of each measure and shall consider the guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300), Section 25356.1(c) of the California Health and Safety Code, and CERCLA guidance documents.

4. Technical reports on compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted monthly to the Board commencing on March 10, 1987 and covering the previous month. On a monthly basis thereafter, these reports shall consist of a letter report that, (1) summarizes work completed since submittal of the previous report, and work projected to be completed by the time of the next report, (2) identifies any obstacles which may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles, and (3), includes, in the event of non-compliance with the Provisions of this Order, written notification which clarifies the reasons for non-compliance and which proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed that was projected for completion, and shall identify the impact of non-compliance on compliance with the remaining requirements of this Order.


On a quarterly basis, commencing with the March 1987 report due April 10, 1987, the monthly report shall include, but need not be limited to, updated water table and piezometric surface maps for all affected water bearing zones, cross-sectional geological maps describing the hydrogeological setting of the site, and appropriately scaled and detailed base maps showing the location of all monitoring wells and extraction wells, and identifying adjacent facilities and structures.

5. If the discharger is delayed, interrupted or prevented from meeting one or more of the completion dates specified in this Order, the discharger shall promptly notify the Executive Officer.
6. All hydrogeological plans, specifications, reports, and documents shall be signed by or stamped with the seal of a registered geologist, engineering geologist, or professional engineer.
7. Copies of all correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order, shall be provided to the following agencies:
 - a. Santa Clara Valley Water District
 - b. Santa Clara County Health Department
 - c. City of Mountain View
 - d. State Department of Health Services/TSCD
 - e. State Water Resources Control Board
 - f. EPA Region 9

Additionally, the Executive Officer may require copies of correspondence, reports and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order to be provided to a local repository for public use.

8. All samples shall be analyzed by State certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.
9. The discharger shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code:
 - a. Entry upon premises in which any pollution sources exist, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
 - b. Access to copy any records required to be kept under the terms and conditions of this Order.
 - c. Inspection of any monitoring equipment or methodology implemented in response to this Order.
 - d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the discharger.
10. The discharger shall file a report on any changes in site occupancy and ownership associated with the facility described in this Order.
11. The discharger shall maintain in good working order, and operate, as efficiently as possible, any facility or control system installed to achieve compliance with the requirements of this Order.
12. The discharger shall report any spill of oil or hazardous material at this site. Spills shall be reported to this Regional Board, at (415) 464-1255 on weekdays during office hours from 8 AM to 5 PM, immediately after occurrence. A written report shall be filed with the Regional Board within five (5) working days and shall contain information relative to: the nature of waste or pollutant, quantity involved, duration of incident, cause of spill, Spill Prevention and Containment Plan (SPCC) in effect, if any, estimated size of affected area, nature of effects, corrective measures that have been taken or planned, and a schedule of these activities, and persons notified.
13. The Board will review this Order periodically and may revise the requirements when necessary.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on January 21, 1987.



ROGER B. JAMES
Executive Officer